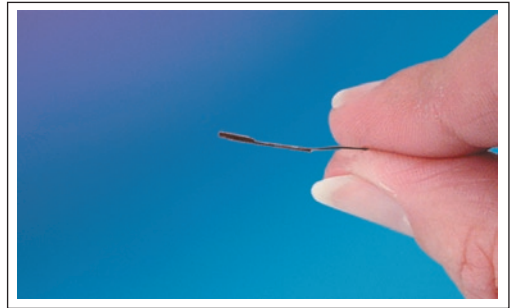


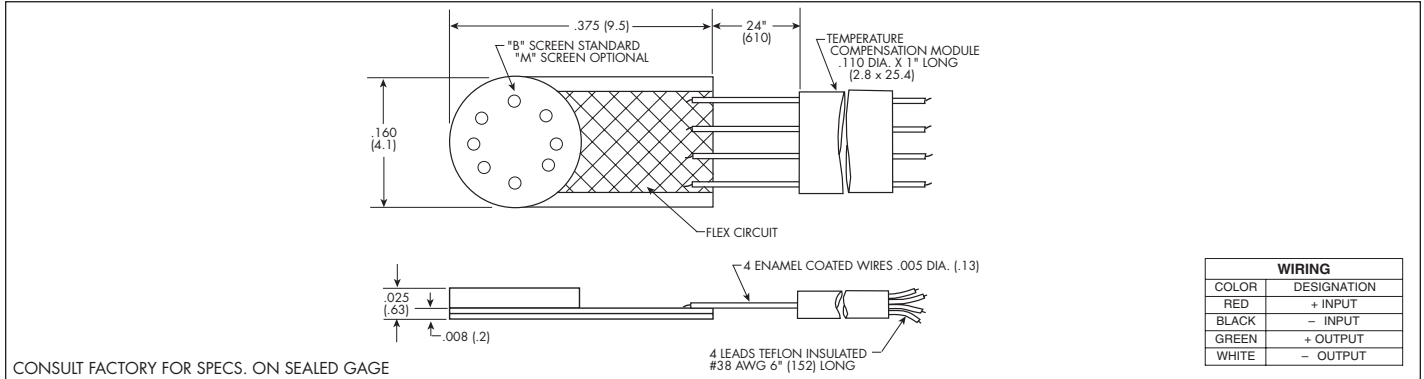


**MICROLINE STRESS ISOLATED SURFACE MOUNT IS®  
PRESSURE TRANSDUCER**  
LQ-47 SERIES LE-47 SERIES

- Designed For Direct Blade Surface Mounting
- Small Size To Maintain Blade Profile
- High G Loading
- Low Base Strain Sensitivity
- High Natural Frequency
- High Temperature Operation Up To 450°F (LE Series)



The LQ/LE-47 Series microline pressure transducer represents the latest build standard in a long line of sensors designed and developed for direct mounting onto engine blades. Using a unique isolation technique to reduce base strain sensitivity effects, the LQ/LE-47 Series are the smallest, lightest units yet developed. With a maximum height of less than 0.025 inch, these units may be mounted in locations on the blade previously inaccessible with a packing density previously impossible.



INPUT Pressure Range	0.35 5	0.7 10	1.7 25	3.5 50	7 100	17 250	35 BAR 500 PSI
Operational Mode	Absolute, Sealed Gage						
Over Pressure	2 Times Rated Pressure With No Change in Calibration						
Burst Pressure	3 Times Rated Pressure						
Pressure Media	All Nonconductive, Noncorrosive Liquids or Gases						
Rated Electrical Excitation	10 VDC/AC						
Maximum Electrical Excitation	15 VDC/AC						
Input Impedance	1000 Ohms (Min.)						
<b>OUTPUT</b> Output Impedance	1000 Ohms (Nom.)						
Full Scale Output (FSO)	100 mV (Nom.)						
Residual Unbalance	± 5 mV (Typ.)						
Combined Non-Linearity, Hysteresis and Repeatability	± 0.1% FSO BFSL (Typ.), ± 0.5% FSO (Max.)						
Resolution	Infinitesimal						
Natural Frequency (KHz) (Typ.)	150	175	240	300	380	550	700
Acceleration Sensitivity % FS/g Perpendicular Transverse	1.5x10 <sup>-3</sup> 2.2x10 <sup>-4</sup>	1.0x10 <sup>-3</sup> 1.4x10 <sup>-4</sup>	5.0x10 <sup>-4</sup> 6.0x10 <sup>-5</sup>	3.0x10 <sup>-4</sup> 4.0x10 <sup>-5</sup>	1.5x10 <sup>-4</sup> 2.0x10 <sup>-5</sup>	1.0x10 <sup>-4</sup> 9.0x10 <sup>-6</sup>	6.0x10 <sup>-5</sup> 6.0x10 <sup>-6</sup>
Base Strain Sensitivity	Less Than 5% FSO for 1000 Microstrain						
Insulation Resistance	100 Megohm Min. @ 50 VDC						
<b>ENVIRONMENTAL</b> Operating Temperature Range	LQ SERIES -65°F to +250°F (-55°C to +120°C) LE SERIES -65°F to +450°F (-55°C to +235°C)						
Compensated Temperature Range	LQ SERIES +80°F to +180°F (+25°C to +80°C) LE SERIES +80°F to +450°F (+25°C to +235°C)						
Thermal Zero Shift	± 2.0% FS/100°F (Typ.)						
Thermal Sensitivity Shift	± 2.0% /100°F (Typ.)						
Steady Acceleration	80,000g. (Max.)						
Linear Vibration	10-20,000 Hz Sine, 100g. (Max.)						
<b>PHYSICAL</b> Electrical Connection	(Before Module) 4 x .005 Enamel Coated Wires 24" Long / 38 AWG 6" Long (After Module)						
Weight	.1 Gram (Nom.) Excluding Module and Leads						

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. Continuous development and refinement of our products may result in specification changes without notice - all dimensions nominal. (F)